

3.3 Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations was signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take appropriate and necessary steps to identify and address disproportionately high and adverse effects of their projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The order works in concert with Title VI of the Civil Rights Act of 1964. Together, these provide the legal and procedural framework for ensuring that Federal actions, including transportation projects, do not discriminate on the basis of race, color, or national origin and do not result in disproportionately high and adverse impacts on minority and low-income populations. The three basic principles of environmental justice are (1) ensure public involvement of low-income and minority groups in decision-making; (2) prevent disproportionately high and adverse impacts of decision on low-income and minority groups; and (3) assure low-income and minority groups receive proportionate share of benefits.

Environmental justice populations are defined as persons who belong to one of these groups: Black, Hispanic, Asian, American Indian and Alaskan Native, Native Hawaiian or Other Pacific Islander, or Low-Income. Low income is defined as a household income at, or below, the US Department of Health and Human Services poverty guidelines.

This analysis was conducted pursuant to Title VI of the Civil Rights Act of 1964, Presidential Executive Order 12898 (Environmental Justice) and Presidential Executive Order 13166 (Limited English Proficiency).

Data from the U.S. Census Bureau (2000 data sets), U.S. Department of Housing and Urban Development (HUD), and local planning documents were used to identify minority, low-income, or ethnic populations in the project study area. For the purposes of the environmental justice analysis, this study area is defined as the Census block groups that are immediately adjacent to I-15. These are shown in Figure 3.3-1. The data was compared to the Salt Lake and Utah County demographic data to determine whether there are higher concentrations of minority, low-income, or ethnic populations in the study area than in the counties in general, based on 2000 U.S Census block group data.

3.3.1 Affected Environment

Figure 3.3-1 shows the census block groups used to develop Table 3.3-1. Census block groups that extend south of, and north of, the logical termini of the project were included to provide a broader area of analysis. Table 3.3-2 provides an overview of the ethnicity and low income characteristics of the Census block groups in the I-15 area.

3.3.1.1 Race and Ethnicity

Table 3.3-1 indicates that ethnic diversity within the project corridor is consistent with the rest of Utah County, according to the U.S. Census. A large majority of individuals identified themselves as white (91%). The largest minority group identified in the project area is Hispanic/Latino (8 %). Less than two percent identified themselves as being outside these two categories.

Table 3.3-1: Racial and Ethnic Populations

Race/Ethnicity	Census Blocks adjacent to I-15 Corridor	Salt Lake County	Utah County
White	91%	87%	92%
Hispanic/Latino	8%	12%	7%
Non-White: Black/African American, Asian, American Indian/Alaskan Native and Native Hawaiian Pacific Islander	<2%	6%	3%

Source: U.S. Census Bureau (2000 data sets). Percentages do not add to 100% because the Hispanic category in the Census is not mutually exclusive from Non-White but is tracked separately by the U.S. Census.

Table 3.3-2: Ethnicity and Income by Census Block Group

Block Group ID	% Non-White	% Hispanic or Latino	% Low-Income
BLOCK GROUPS IN UTAH COUNTY			
1	9%	10%	1%
2	11%	12%	4%
3	8%	7%	8%
4	8%	10%	10%
5	3%	4%	8%
6	3%	2%	12%
7	5%	6%	8%
8	7%	9%	2%
9	3%	2%	8%
10	11%	5%	0%
11	7%	0%	57%
12	17%	18%	11%
13	16%	13%	20%
14	29%	35%	27%
15	15%	19%	4%
16	8%	10%	0%
17	10%	11%	4%
18	14%	13%	15%
19	10%	12%	5%
20	22%	28%	19%
21	19%	22%	20%
22	21%	21%	12%
23	13%	20%	15%
24	19%	17%	5%
25	12%	11%	1%
26	9%	5%	12%
27	10%	4%	16%
28	10%	11%	2%
29	10%	11%	11%
30	8%	9%	12%
31	9%	14%	16%
32	18%	18%	12%
33	11%	10%	5%
34	10%	8%	10%
35	5%	5%	9%
36	6%	10%	17%
37	8%	7%	15%
38	0%	31%	0%
39	7%	10%	9%
40	8%	7%	11%
41	5%	5%	14%
42	9%	5%	23%
43	5%	3%	8%
BLOCK GROUPS IN SALT LAKE COUNTY			
	8%	5%	0%
44	23%	15%	2%
45	8%	8%	8%
46	8%	5%	8%
47	13%	6%	0%
48	13%	9%	6%

% Non-White	% Hispanic or Latino	% Low-Income
PROJECT CORRIDOR AVERAGE		
9%	8%	7%
UTAH COUNTY		
3%	7%	12%
SALT LAKE COUNTY		
6%	12%	8%

KEY
10-17% Minority
18-26% Minority
27% and Above Minority
9-15% Hispanic
16-23% Hispanic
24% and Above Hispanic
8-13% Low-Income
14-20% Low-Income
21% and Above Low-Income

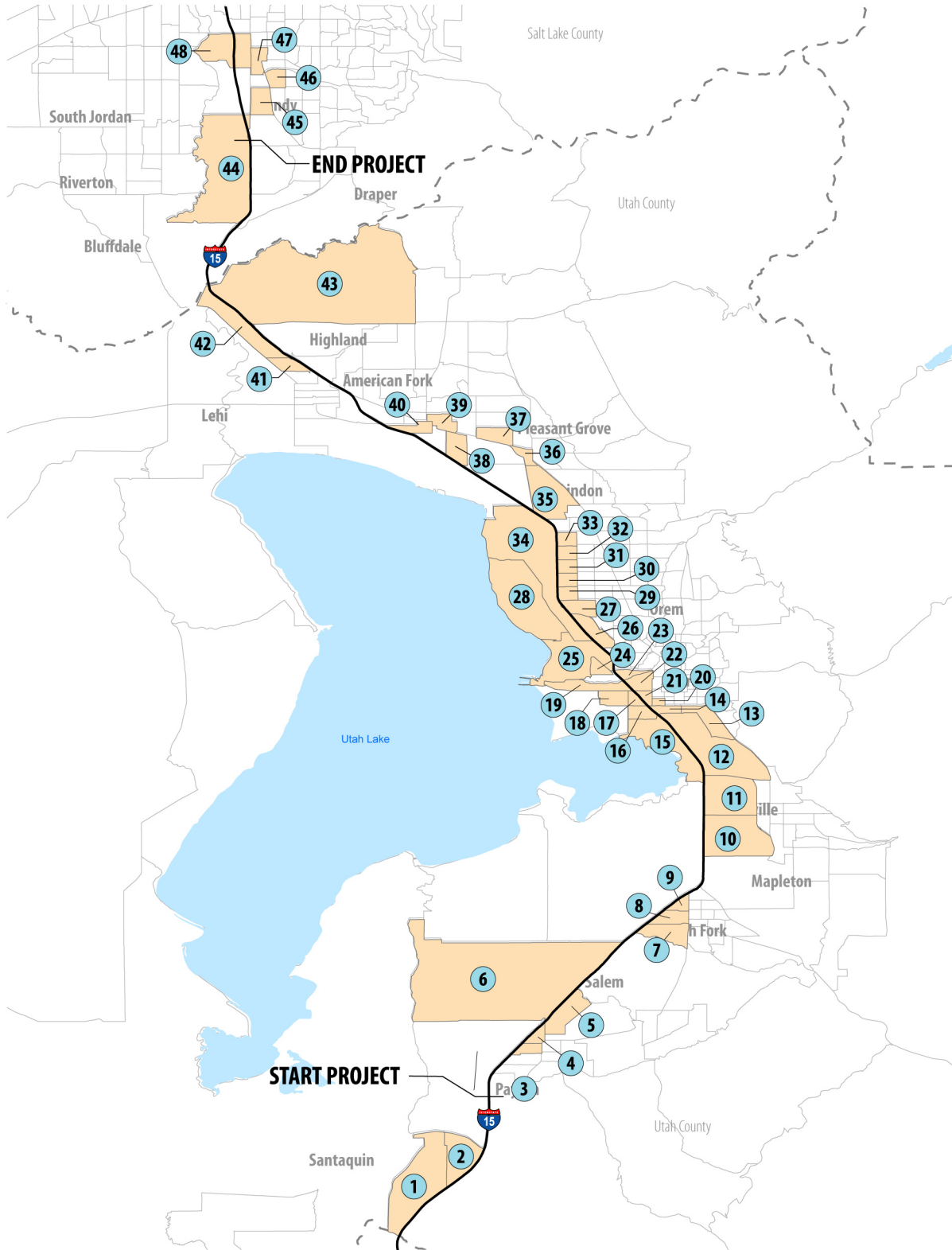


Figure 3.3-1
Census Block Groups

LEGEND:

- 47 Block Group Identification Number
- Census Block Group



3.3.1.2 Limited English Proficiency

In accordance with Presidential Executive Order 13166, linguistic isolation was determined based on whether a household had adults who did not speak English well. Approximately 4 percent of the residents spoke Spanish with limited command of the English language. Within the Hispanic population of the project study area, 29 percent reported that they did not speak English well or at all. According to the 2000 Census, just over 4 percent of the population in the environmental justice study area resided in households that were linguistically isolated. Of those living in linguistically isolated households, 78 percent spoke Spanish, 5 percent spoke another Indo-European language, and 14 percent spoke an Asian or another Pacific Island language. For comparison, 4 percent of Salt Lake County and 2 percent of Utah County residents live in linguistically isolated households. Similar to residents of the project study area, the majority of the population in both counties residing in linguistically isolated households spoke Spanish.

3.3.1.3 Income Characteristics

Table 3-3.3 presents income data for the I-15 study area, and Utah and Salt Lake counties. Residents within the study area have slightly lower median household incomes than the rest of Salt Lake and Utah counties. In Utah County, there is student housing adjacent to the I-15 corridor, which may account for lower median incomes near I-15. The total population of college or graduate school students in the Provo/Orem area is over 41,400 according to the 2005 US Census data. (U.S. Census, 2007).

Approximately 7 percent of the population along the I-15 corridor was below the poverty line in 1999. In comparison, 8 percent of the population of Salt Lake County and 12 percent of the population of Utah County was below the poverty line in 1999 (Tables 3.3-2 and 3.3-3). In 2000, an estimated four percent of households in the project study area received public assistance income. Similarly, in Salt Lake and Utah counties three percent of households received public assistance income.

Table 3.3-3: Income Characteristics

	Census Blocks adjacent to I-15 Corridor	Salt Lake County	Utah County
Below Poverty Level in 1999 (Individuals)	7%	8%	12%
Median Income in 1999 (Households)	\$42,204	\$48,373	\$45,833
Per Capita Income in 1999	\$15,485	\$20,190	\$15,557
Households Receiving Public Assistance Income	4%	3%	3%

Source: U.S. Census Bureau (2000 data sets)

3.3.1.4 Summary of Environmental Justice Characteristics

This analysis indicates that households within the project study area are similar to Utah and Salt Lake counties in regard to income and ethnicity. However, there are a few areas that have notably higher concentrations of low-income, minority, or ethnic populations. Those areas (census block groups) that have higher percentages of low-income, minority, or ethnic populations than the environmental justice study area average are spread throughout the corridor, and are shown in Table 3.3-2.

3.3.2 Environmental Justice Populations Outreach

The I-15 EIS process involved several ways to provide project information and opportunity for involvement by all populations. As the largest group of ethnic populations identified is Hispanic, the use of Spanish in advertising and other informational materials has been incorporated into the program.

A telephone survey was conducted at the start of the project in order to gather input from a wide-range of stakeholders in a method that had scientific reliability of plus or minus 5 percent. Survey results indicated strong concern for transportation issues and interest in multi-modal solutions.

The public outreach campaign began in July 2005 with the launch of the I-15 “Bubble Bus”, a bus wrap advertisement that displayed project information and invited comments. The bus operated on a UTA bus route that operated daily along I-15 and local streets. The text of the advertisement addressed both roadway and transit modes and could be seen by transit users as well as interstate commuters. A Spanish phrase was used on the bus wrap to indicate that other languages would be welcome on the project comment telephone line or in writing. The bus wrap provided a toll-free telephone number and the project website address as methods to learn about the project and provide comment. The telephone comment line greeting also indicated that comments in Spanish were welcome.

Specific media targeting populations, where English is not the primary language, were provided with project updates in conjunction with distribution among other media outlets:

- Univision;
- Telemundo;
- Bustos media;
- El Semanal Magazine;
- Mundo Hispano -KSL munhispano.com;
- Diversity Times;
- La Voz Latina de Utah;
- Nuestro Mundo, Magazine; and
- The Standard Examiner - Spanish Page.

3.3.3 Alternative 1: No Build Impacts

Under Alternative 1, the impacts to environmental justice populations are associated with the existing and future conditions within the project study area. These populations would experience the same traffic and mobility, air quality, noise and community cohesion conditions associated with the existing transportation network as all other I-15 users and communities adjacent to I-15.

The impacts of Alternative 1 to low-income, minority, or ethnic populations are not more adverse than the impacts to other populations, and the impacts are not disproportionately borne by low-income, minority, or ethnic populations when compared to other populations.

3.3.4 Alternative 4: I-15 Widening and Reconstruction Impacts

The impacts of Alternative 4 that have the potential to affect low-income, minority, or ethnic populations include:

- Noise impacts and air quality impacts;
- Impacts to visual quality;
- Traffic/transportation impacts;
- Residential and business relocations;
- Impacts to the community cohesion, and
- Impacts to social and cultural resources.

The determination of whether there would be disproportionately high and adverse impacts on environmental justice populations was made based on available Census information for the block groups adjacent to I-15. While the low-income, minority, or ethnic populations identified in the Census block groups that are adjacent to I-15 may experience some of these impacts, based on the available information, a determination that these impacts would not be disproportionately high and adverse on these population was made. Table 3.3-4 summarizes potential for impacts to these resources. A few of the larger issues are discussed below.

3.3.4.1 Noise and Air Quality

The noise and air quality impacts of Alternative 4 documented in Section 3.7 and 3.8, respectively, were reviewed in the context of the general dispersion of minority or low income populations along I-15. Based upon the review of locations of the 20 noise barriers that extend for 14.5 miles of I-15 of Alternative 4, the proposed locations of noise barriers likely do not have a disproportionately high and adverse impact on any minority or low-income populations.

Section 3.8 of this Chapter addresses air quality impacts. No exceedances of the National Ambient Air Quality Standards (NAAQS) would occur as adverse impacts to any population as a result of Alternative 4.

3.3.4.2 Visual

The visual impacts documented in Section 3.9 were reviewed in the context of the general dispersion of minority or low income populations along I-15. Based upon the review of noise barrier locations, widening of structures and placement of new interchanges along Alternative 4, the proposed project would not have a disproportionately high and adverse impact on any minority or low-income populations.

3.3.4.3 Relocations

Depending on the option in Central Utah County (Options A, B, C or D), and in North Utah County for American Fork Main Street (Options A, B or C), the total amount of property acquisition would range from approximately 478 acres to 544 acres. The number of buildings acquired could range from 61 to 130 buildings. The number of housing units that would be displaced would range from 15 to 88. Business displacements would range from 39 to 69. The Preferred Alternative includes Option D in Provo/Orem and Option C at American Fork, which will displace the fewest residential units (15) and business units (38). Specific information on the ethnicity or income level of each of these household units, businesses and parcels was not available. Given that they are dispersed throughout the 43-mile long I-15 corridor and the average percentage of low income and Hispanic populations in the census block adjacent to I-15 is similar to that of the counties as a whole, it is unlikely that there are disproportionate adverse impacts from relocations for these populations. All affected households and businesses would benefit equally from the provision of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and the Utah Relocation Assistance Act, Utah Code Section 57-12.

3.3.4.4 Impacts to Social and Cultural Resources

Impacts to social and cultural resources could include impacts to meeting halls, public gathering places or cultural resources of special importance to Environmental Justice populations, which might suffer disproportionate, adverse effects. No such adverse effects were identified through survey of archaeological or architectural resources (Section 3.16), or through public outreach (Chapter 5). No such public recreation areas were identified through Section 4(f) review (Chapter 4).

3.3.4.5 Summary of Impacts of Alternative 4

The impact of Alternative 4 on all populations and on environmental justice populations is shown in Table 3.3-4. It is based on available U.S. Census information and the technical analyses presented in the referenced sections of this EIS. Based on the Census block group information, there would be no difference between the level of impacts of the Provo/Orem design Options A, B, C, and D, and the American Fork Main Street Options A, B, and C on environmental justice populations. All populations would share in the benefits of the project.

Table 3.3-4: Summary of Impacts of Alternative 4

Resource	Direct Impact on all Populations	Disproportionate Adverse Impact to Environmental Justice Populations
Access to Transportation (detailed in Chapter 2)	Beneficial impact due to increased capacity and safety for all I-15 users.	No adverse impact, therefore no disproportionate adverse impact.
Community Cohesion (detailed in Section 3.2)	Beneficial impact because of improved access across I-15, new access across I-15, and incorporation of planned pedestrian and bicycle crossings.	No adverse impact therefore no disproportionate adverse impact.
Relocations (detailed in Section 3.4)	Displaced households range from 20 to 117; displaced businesses from 50 to 84; depending on the design option.	Disproportionate adverse impact unlikely. All populations subject to and benefit from Uniform Relocation Assistance and Real Property Acquisition Policies Act and Utah Relocation Assistance Act.
Economic (detailed in Section 3.6)	Regional beneficial impact based on decreased I-15 travel times, increased accessibility, construction generated employment.	No adverse impact, therefore no disproportionate adverse impact.
Noise (detailed in Section 3.7)	Noise level approaches or exceeds Federal standards at 910 receivers.	No disproportionate adverse impact. Impacted receivers include a variety of sensitive types.
Air Quality (detailed in Section 3.8)	No adverse impact.	No adverse impact, therefore no disproportionate adverse impact.
Visual (detailed in section 3.9)	Change to visual environment for all property owners along I-15 and all I-15 users.	Change in visual environment for all property owners along I-15 as well as all I-15 users. No disproportionate adverse impact.
Cultural and Social resources (detailed in Chapters 4 and 5, and Section 3.16)	No adverse effects were identified through survey of archaeological or architectural resources, or through public outreach. No such public recreation areas were identified through Section 4(f) review.	No adverse impact, therefore no disproportionate adverse impact.
Natural Resources	No adverse impacts. All impacts are mitigated.	No adverse impact, therefore no disproportionate adverse impact.

3.3.5 Mitigation

Since no disproportionate adverse impacts to Environmental Justice populations were identified, no mitigation is proposed.

3.4 Relocations

Relocation impacts are associated with the properties that would be directly affected by the acquisition of additional right-of-way. These relocation impacts would affect residential, commercial, vacant and agricultural properties. The properties either fall within or adjacent to the proposed new right-of-way, are very close to the proposed new right-of-way or pavement surfaces, or cannot be safely accessed due to roadway improvements. Project plans and aerial photographs were used in making these determinations.

Where property acquisition is necessary, land owners are compensated under the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. In the State of Utah, for transportation projects, the Utah Department of Transportation (UDOT) is the lead agency responsible for the Federal Relocation Program and the State of Utah Relocation Program (as defined by the Utah Relocation Assistance Act, Utah Code Section 57-12). Under these laws, if an individual is required to move as a result of a Federal or federally assisted program or from a State or state assisted program or project, assistance will be provided.

These measures are intended to provide consistent policies and fair and equitable treatment of individuals affected by state and federal activities. The Utah Department of Transportation works with owners of properties from which right-of-way is required for a project.

When an easement is purchased, UDOT would acquire the right to use the property for a specific purpose and the property owner would retain title to the land. If the property owner's residence or business must be displaced, UDOT will work with affected individuals to assure that appropriate assistance is provided.

3.4.1 *Analysis Methodology*

The conceptual engineering drawings in Volume II of this EIS provided the basis from which impacts were determined. The proposed environmental impact limit line is shown as a yellow line on these drawings. This environmental limit line was established based on the conceptual engineering conducted for the alternatives and the options within Alternative 4. It was generally established as a 50-foot offset from the shoulder of the Alternative 4 I-15 mainline, a 25-foot offset from the shoulder of ramps, and a 15-foot off-set from the shoulder of cross streets and from the frontage roads in Options A and B. These offsets take into account grade differences and resulting slopes. The environmental limit line also incorporates the area required to accommodate temporary construction activity. Buildings that would be displaced are shown with hatched markings on these drawings. Parcels that would be fully acquired are noted as "full" take in the parcel tables in Volume II.

The identification of impacts to properties and buildings followed these guidelines:

- The amount of property impacted within the environmental impact limit line is approximate and was calculated using the conceptual engineering drawings in Volume II and the Counties' Assessor's office parcel information.
- Parcels were generally assumed to be full takes under the following conditions:
 - If a building is located within 15 feet of the edge of the proposed roadway improvement;
 - If access to a property is removed as a result of the alternative in question; or
 - If approximately 50 percent of the total parcel area would be impacted. However, if 50% of the remaining parcel appeared to be deemed "reasonably usable", it was not counted as a full take.
- Where commercial building or multi-family structures would be acquired, field verification was used to determine the number of businesses within the building and the number of dwelling units within the structures, respectively.

- Using the tax assessors' databases for Salt Lake County and Utah County and aerial photography mapping, the type of affected property was determined (residential, commercial, industrial, etc.).
- For multi-family residential units, the number of residential units that would be displaced was verified through field verification.
- The number of businesses that would be displaced was verified through field verification.

The above guidelines were applied to each alternative and to the design options within Alternative 4 in the Provo/Orem and American Fork Main Streets areas.

3.4.2 Alternative 1: No Build Alternative

The proposed project improvements on I-15 would not be constructed and no parcel acquisitions or building displacements would occur.

3.4.3 Alternative 4: I-15 Widening and Reconstruction

The majority of Alternative 4 can be constructed within the existing I-15 right-of-way. However, construction of some of the proposed improvements in Alternative 4 would require acquisition of land from adjacent parcels along the project corridor. Both full parcel acquisitions and partial parcel acquisitions would occur, resulting in the conversion of existing property to roadway use. Potential building displacements would occur where full parcel acquisition is needed for the proposed project. Potential parcel acquisitions for Alternative 4 are summarized in Table 3.4-1.

Depending on the option selected in Central Utah County (Options A, B, C or D), and in North Utah County for American Fork Main Street (Options A, B or C), the total amount of property acquisition would range from approximately 478 acres to 554 acres. The number of buildings acquired could range from 61 to 130 buildings. The number of housing units that would be displaced would range from 15 to 88. Business displacements would range from 37 to 69. The Preferred Alternative includes Option D in Provo/Orem and Option C at American Fork, which will displace the fewest residential units (15) and business units (46). Table 3.4-1 lists impacts by different option.

3.4.3.1 Indirect Impacts

Businesses displaced by Alternative 4 could potentially relocate into other commercial developments within the adjacent cities or within Utah County. These relocations may have an indirect impact on the commercial developments into which existing dislocated businesses relocate. This impact may be positive or negative depending on whether the relocated businesses contribute to the overall viability of the commercial development or introduce direct competition for existing businesses in that development.

3.4.4 Mitigation

Where potential building displacements will occur as a result of parcel acquisitions, compensation will be provided to affected property owners. Compensation for parcel acquisitions, including buildings and structures will be provided at fair market value. In providing compensation, the proposed project will comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and the Utah Relocation Assistance Act (Utah Code Section 57-12). These regulations require that relocation services will be provided to all affected property owners without discrimination.

Under state and federal regulations, no person is required to move from their residence unless comparable replacement property is available for sale or rent within the potentially displaced person's financial capabilities. The location and sale or rent price of the comparable property must be made available in writing to the affected persons. In the event that replacement housing may not be available within the local resident's financial capabilities, several alternative solutions may be used. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended states the following:

SEC. 206. (a) If a program or project undertaken by a Federal agency or with Federal financial assistance cannot proceed on a timely basis because comparable replacement dwellings are not available, and the head of the displacing agency determines that such dwellings cannot otherwise be made available, the head of the displacing agency may take such action as is necessary or appropriate to provide such dwellings by use of funds authorized for such project. The head of the displacing agency may use this section to exceed the maximum amounts which may be paid under sections 203 and 204 on a case-by-case basis for good cause as determined in accordance with such regulations as the head of the lead agency shall issue.

(b) No person shall be required to move from his dwelling on account of any program or project undertaken by a Federal agency or with Federal financial assistance, unless the head of the displacing agency is satisfied that comparable replacement housing is available to such person.

Options under this provision may include the following:

- Purchasing housing for the displaced person and renting or selling the acquired dwelling at a price within the person's financial means;
- Renovating existing housing;
- Providing financing for the homeowner occupants with low incomes and/or poor credit ratings who have occupied their home for at least 180 days; and
- Entering into partnerships with public or private agencies that provide housing for low-income persons.

UDOT will work with affected property owners to ensure that appropriate replacement housing opportunities are made available to all potentially displaced residents within the proposed project corridor.

Table 3.4-1: Summary of Alternative 4 Relocation Impacts

Geographic Section	Parcels Affected			Acquisition Type*	Area Acquired (Acres)	Buildings Acquired	Housing Units Displaced	Businesses Displaced
	Total	City/State	Private					
SOUTH UTAH COUNTY	167	6	161	14 Full; 147 Partial	90	10	1	7
CENTRAL UTAH COUNTY								
Option A	325	38	287	105 Full; 182 Partial	137	79	73	39
Option B	304	28	276	99 Full; 177 Partial	118	67	19	38
Option C	214	34	180	25 Full; 155 Partial	89	19	55	8
Option D	220	24	196	44 Full; 152 Partial	75	34	2	16
Central Utah County, Common Sections	229	9	220	24 Full; 196 Partial	41	18	10	4
NORTH UTAH COUNTY								
American Fork Main Street Option A	63	8	55	9 Full; 46 Partial	49	7	1	9
American Fork Main Street Option B	89	7	82	11 Full; 71 Partial	61	11	3	9
American Fork Main Street Option C	64	8	56	18 Full; 38 Partial	63	16	1	10
North Utah County, Common Sections	328	29	299	25 Full; 274 Partial	145	7	1	9
SOUTH SALT LAKE COUNTY	79	19	60	5 Full; 55 Partial	78	0	0	0

The Preferred Alternative includes Option D in Provo/Orem and Option C in American Fork, plus all the common sections of Alternative 4: I-15 Widening and Reconstruction

* "Full" means the entire property would be acquired. "Partial" means only a portion of the property would be taken. This column does not include city or state owned parcels.

3.5 Farmland

This section describes the farmland characteristics of the I-15 study area. Included are descriptions of the affected environment, potential impacts of the alternatives, and any required mitigation measures. The study area for the farmland and agriculture analysis is defined as agricultural lands on either side of the existing I-15 freeway. The United States Department of Agriculture (USDA) Census of Agriculture was used to provide information on farms in Utah and Salt Lake counties. Additionally, existing information from the Natural Resources Conservation Service (NRCS) and Utah and Salt Lake counties was used to identify important farmland areas along the project corridor.

3.5.1 Affected Environment

This discussion of the affected environment includes a description of the regulatory context associated with farmland protection and a general discussion of the existing farmlands in Utah and Salt Lake counties. This section discusses protected farmlands located within the study area and farmlands specifically classified as prime, unique, and state wide importance, and the Agricultural Protection Areas near the project corridor. The EIS team studied farmland that is contiguous with or abuts I-15, where Alternative 4 could prevent, reduce, or prohibit farming practices.

3.5.1.1 Regulatory Context

The Farmland Protection Policy Act of 1981 (7 USC 4201-4209) requires that federal projects minimize the conversion of farmland to nonagricultural uses and that such projects consider state and local farmlands protection policies to the greatest extent practical. The Act protects prime and unique farmlands, as well as farmlands of statewide or local importance. The USDA Soil Surveys for Utah and Salt Lake counties indicate that protected farmlands are located within the study area (NRCS, 2004).

According to the policy and interpretation by the Utah Natural Resources Conservation Service (NRCS), the agency with oversight, however, the Act pertains only to farmlands located *outside* municipal boundaries. Farmlands located inside incorporated municipal boundaries and/or farmlands committed to urban development, are not protected under the policy. As such, farmlands identified for future development within a municipality's general land use plan would not be protected under the policy (NRCS, 2005). That Farmland Protection Policy (7 USC 658.2) states:

"Farmland means prime or unique farmlands as defined in section 1540(c)(1) of the Act or farmland that is determined by the appropriate state or unit of local government agency or agencies with concurrence of the Secretary to be farmland of statewide or local importance. "Farmland" does not include land already in or committed to urban development or water storage. Farmland "already in" urban development or water storage includes all such land with a density of 30 structures per 40-acre area. Farmland already in urban development also includes lands identified as "urbanized area" (UA) on the Census Bureau Map, or as urban area mapped with a "tint overprint" on the USGS topographical maps, or as "urban-built-up" on the USDA Important Farmland Maps. Areas shown as white on the USDA Important Farmland Maps are not "farmland" and, therefore, are not subject to the Act. Farmland "committed to urban development or water storage" includes all such land that receives a combined score of 160 points or less from the land evaluation and site assessment criteria."

In addition to the three types of farmland covered by the Farmland Protection Policy Act, the Utah Agricultural Protection Act also provided a mechanism for the protection of farmlands. The categories of farmlands are defined below.

Prime Farmland

Section 2 of the Farmland Protection Policy Act defines prime farmlands as the land with the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops with the minimum input of fertilizer, pesticides, and labor. This includes lands that possess the above characteristics but are being used to produce livestock and timber (USC, 1981). Some soils that are identified as "Prime farmland" can be

categorized as “Prime farmland if irrigated,” this reflects that some soils require watering by irrigation in order to be productive farmlands. This is applicable to all of the Prime Farmlands in this analysis,

Unique Farmland

Unique Farmland is defined as land that is used for production of specific high value food and fiber crops. The land must have the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed (including water management) according to acceptable farming methods. Examples include citrus, nut, fruits, and vegetable crops (USC, 1981).

Farmland of Statewide Importance

These farmlands are defined as having local importance for the production of food, fiber, and oil crops. These farmlands are typically lesser quality than prime farmlands but have the necessary physical and chemical properties to sustain high quality agricultural yields (USC, 1981). These farmlands are located throughout incorporated and unincorporated areas of Utah County and within developed areas of Salt Lake County, the NRCS soil survey does not identify farmlands of “local importance” but does use the classification of “Farmland of Statewide Importance” and that nomenclature is what is discussed below in the farmland impacts section (NRCS, 2004).

Agricultural Protected Farmlands

Farmlands that are not protected by the Federal government but are protected instead by the State of Utah (in the Agricultural Protection Act, Utah State Code 17-41) are identified as agricultural protected farmlands (Utah, 2002). The Agricultural Protection Areas (APA) are typically established by the owner to protect a farming operation from nuisance complaints regarding noise, odors, and sounds resulting from normal agricultural operations. There are six APA's in Utah County. They are located near Payson, Spanish Fork area, Orem, and American Fork (Utah County, 2005). There are no agricultural protected farmlands in Salt Lake County within the study area. The issue of potential impacts to the APAs in Utah County was identified through public comment received during the preparation of this EIS. The locations of the six APAs are shown on Figure 3.5-1.

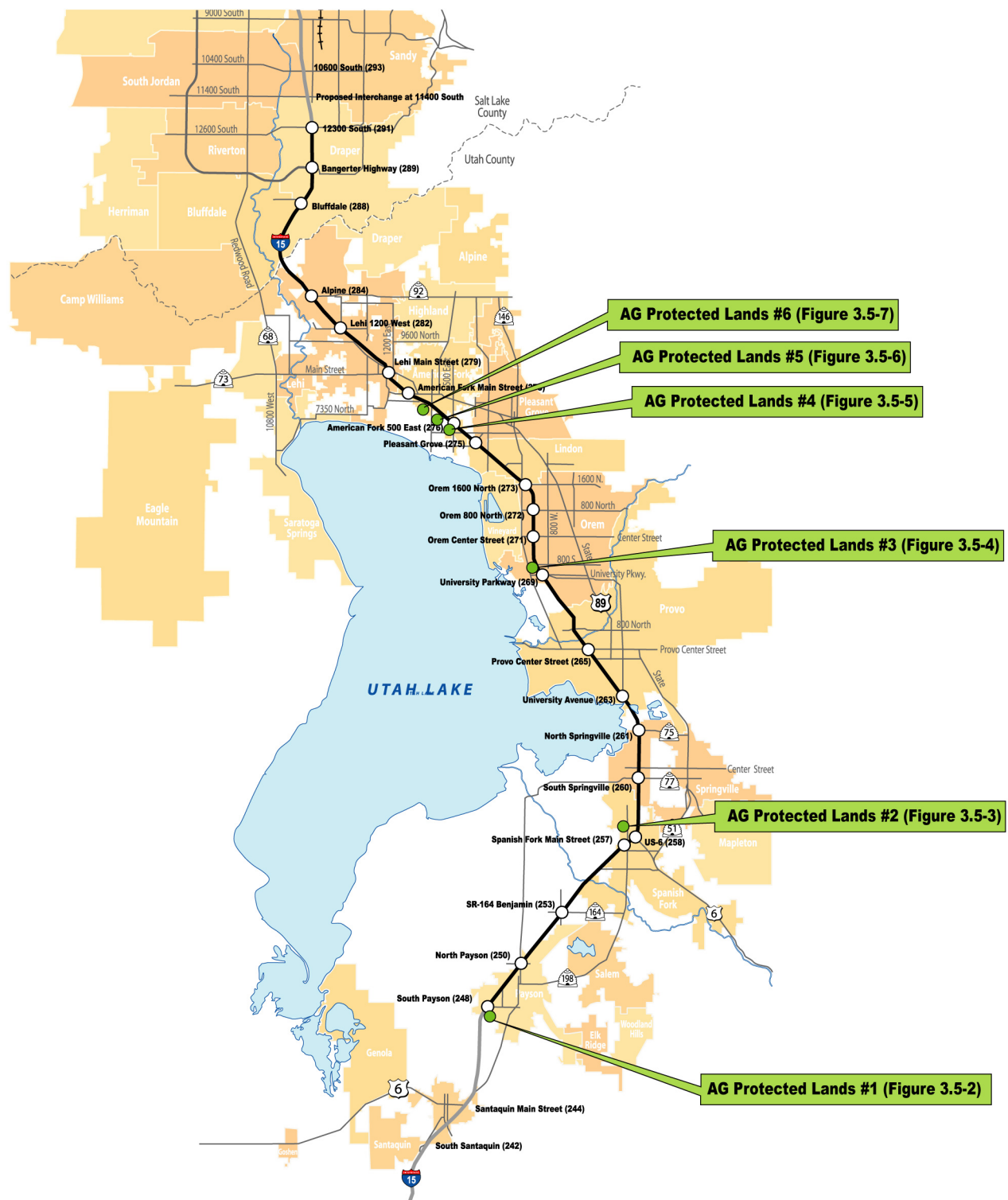
According to Utah Administrative Code Section 17-41-405 (4)(a) Agricultural Protection Areas cannot be condemned for highway purposes unless: (1) the landowner requests the removal of the designation, or (2) the applicable legislative body (that is, the legislative body of the county, city, or town in which the agriculture protection zone is located) and the advisory board approve the condemnation, provided that "there is no reasonable and prudent alternative to the use of the land within the agriculture protection area for the project."

APA status is typically maintained even after a property is developed and no longer in agricultural use, unless the property owner files a petition to remove the land from the APA. When this occurs, the rest of the APA can maintain its protection status, and the boundaries of the APA are redefined.

3.5.1.2 Existing Farmlands

According to the USDA National Agricultural Statistics 2002 Census of Agriculture, the amount of agricultural land in Utah and Salt Lake counties has declined over the last 10 years (USDA, 2002). In 2002, in Utah County, approximately 343,072 acres of farmland remained, down eight percent from the last Census of Agriculture in 1997. There were approximately 82,267 acres of farmland remaining in Salt Lake County, down 31 percent from 1997. Although the total acreage decreased in that time frame, the number of farms increased slightly, by less than one percent for both counties. Most farms in both counties are 49 acres or less.

Where there are farmlands, the majority of farming activities occur in Utah County. Prime farmlands are located along the I-15 corridor in Utah County. Unique farmlands are mostly located in areas of Utah County (NRCS, 2004). Farmlands are located within Salt Lake County but mostly within developed areas of the County. Farms in both counties are typically used to pasture livestock. Other typical uses include raising forage crops or small grains. Farmlands in Utah County are located on both sides of I-15 between Payson and Lehi. Existing farmlands in Salt Lake County occur on the west side of I-15, south of 14600 South on the west side of I-15 in Bluffdale, and south of 12300 South.



Scale in Miles
0 1 2 3 4 5

LEGEND:

● Locations of Agricultural Protected Lands (Dots are not to scale)



Figure 3.5-1
Agricultural Protection Areas in the I-15 Project Corridor

3.5.2 Farmland Impacts

The potential impacts to farmlands that will be caused by Alternative 1 and Alternative 4 are described in this section.

3.5.2.1 Alternative 1: No Build

The No-Build Alternative does not contain improvements to I-15 in the study area and therefore would not have adverse impacts to farmlands or agriculture within the I-15 corridor.

3.5.2.2 Alternative 4: I-15 Widening and Reconstruction

The project alignment drawings, property impact tables and aerial photographs were reviewed to determine potential impacts to the prime, unique, and of statewide importance farmlands. Also identified were potential impacts to the Agriculture Protection Areas (APA) under the Utah Agricultural Protection Act.

In Salt Lake County, the project corridor is almost entirely located within incorporated municipal boundaries. Thus, the Farmland Protection Policy Act would not apply to farmlands in these incorporated areas. Farmlands located outside of municipalities are located in Utah County, particularly along the western highway segment between Spanish Fork and Payson.

Impacts were analyzed using the known existing right-of-way lines and the proposed environmental impact line for Alternative 4. If farmland that has been determined Prime, Unique, or of Statewide Importance is impacted, a Farmland Conversion Impact Rating Form must be completed by the federal agency (or the agency's representative) and the NRCS. The project team coordinated with the local NRCS field office to identify potentially affected farmland in the project area and to evaluate impacts¹ (Grow, 2007). The NRCS evaluated Alternative 4 to determine a Farmland Conversion Impact Rating (Form CPA-106 in Appendix A). This form includes the total acres of farmland to be converted directly and indirectly, a land evaluation of the number of farmland acres by type that would be affected, and a corridor assessment using 10 land use criteria. The NRCS is required to consider alternatives that avoid impacts and measures to minimize harm to prime farmlands if the land evaluation criteria and the site assessment criteria total 160 or more points.

The conversion impact rating for Alternative 4 totaled 112 points, below the 160-point threshold for avoidance alternatives analysis. Thus the impacted farmland would not be subject to avoidance alternatives analysis under the provisions of the Farmland Protection Policy Act. However, for the purpose of disclosing the information, the potential farmland impacts are summarized below. Impacts to the APAs are specifically identified and illustrated.

South Utah County

Based on farmland classification data collected from the Natural Resource Conservation Service's web soil survey, widening of the highway and other proposed improvements to I-15 would affect farmland. Much of the mainline alignment passes through areas classified as Prime Farmland. Other farmland classifications through which the I-15 corridor passes, and that are located outside of municipal boundaries, include "Farmland of Statewide Importance", and "Farmland of Unique Importance."

Using the conceptual engineering plans shown in Volume II of this EIS; 54 acres of farmland in South Utah County Section would be affected by potential parcel acquisitions and conversion to freeway use. This farmland falls into the classifications of either Prime Farmland or Farmland of Statewide Importance. In general, there is a greater prevalence of Prime Farmland" in South Utah County Section than Farmland of Statewide Importance.

The South Utah County Section has the most unincorporated land in the project corridor. Much of the area adjacent to and immediately east of the existing mainline is both unincorporated and classified as either Prime Farmland or Farmland of Statewide Importance. As these lands abut I-15 and additional ROW that will be acquired for Alternative 4, it is likely that impact to this farmland would occur. Where farmland is acquired and converted to freeway use, future agriculture use would be precluded.

¹ Grow, Raymond, 2007. Personal communication in meetings, telephone and email correspondence of Raymond Grow, NRCS Utah, and Lani Eggertsen-Goff, PB, May 1, 9, 10, 23, 25, 29 and 31, 2007.

Two Agricultural Protection Areas are located within South Utah County Section adjacent to the I-15 corridor. These APAs may be minimally impacted by Alternative 4. The location of the APAs and impacts are illustrated in Figures 3.5-2 and 3.5-3. The initial location of a potential drainage basin in Alternative 4 intersected the northwest corner of the APA illustrated in Figure 3.5-3. This proposed drainage basin location was moved slightly to the north to avoid impacts to this APA.

Central Utah County

The Central Utah County Section is more developed and contains less agricultural land than South Utah County Section, but the project would still affect farmlands to varying degrees depending on final design of Alternative 4. This section has little land outside municipal boundaries. The main area of unincorporated land in Central Utah County Section is southwest of Provo's southern boundary. As in South Utah County Section, Central Utah County Section farmland adjacent to I-15 is characterized as primarily Prime Farmland, and Farmland of Statewide Importance. In general, there is a greater prevalence of Prime Farmland in Central Utah County Section. Impacts by design option are discussed below:

Option A: Under Option A, 9.23 acres of farmland would be affected, which include 0.15 acre of Prime Farmland and 9.08 acres of Farmland of Statewide Importance.

Option B: Under Option B, 9.23 acres of farmland would be affected, which include 0.15 acre of Prime Farmland and 9.08 acres of Farmland of Statewide Importance

Option C: Under Option C, 0.45 acres of farmland classified as Farmland of Statewide Importance would be affected.

Option D (Preferred): Under Option D, 0.45 acres of farmland classified as Farmland of Statewide Importance would be affected.

Agricultural Protection Area

One APA is located within Central Utah County Section within 0.15 mile of the I-15 corridor. This APA will not be impacted by Alternative 4. The location of the APA is illustrated in Figure 3.5-4.

North Utah County

North Utah County Section also contains a mix of farmland classifications. There are portions of "Farmland of Statewide Importance", "Farmland of Unique Importance" and Prime Farmland. The amounts of land affected for the Design Options in North Utah County Section are as follows:

American Fork Option A (Diamond Interchange): 10.94 acres of farmland would be affected, which include 1.43 acres of Prime Farmland and 9.50 acres of Farmland of Statewide Importance.

American Fork Option B (South SPUI Interchange): 42.47 acres of farmland would be affected, which include 29.81 acres of Prime Farmland and 12.66 acres of Farmland of Statewide Importance.

American Fork Option C ((North SPUI Interchange (Preferred)): 15.54 acres of farmland would be affected, which include 4.92 acres of Prime Farmland and 10.62 acres of Farmland of Statewide Importance.

Agricultural Protection Areas

The location of the APAs and impacts within North Utah County are illustrated in Figures 3.5-5 through 3.5-11.

One APA south of the 500 East American Fork interchange would be impacted by Alternative 4, regardless of American Fork Main Street option (Figure 3.5-5). At this location, Alternative 4 would convert approximately 0.26 acres of agricultural land to transportation use. Option B at American Fork Main Street would convert 5.09 acres of APA lands to transportation use, as shown on Figure 3.5-10.

South Salt Lake County

In this section, only a small part of the I-15 alignment passes through unincorporated areas. The largest unincorporated area in this section includes “Not Prime Farmland” classifications with steep slope soil that make it unsuitable for farming. In addition, only a small portion of the alignment passes through farmland, resulting in few impacts on farmland in this section. Approximately 0.02 acres of farmland in the South Salt Lake County Section would be affected by Alternative 4. No APAs are located within South Salt Lake County Section near the I-15 corridor.

3.5.2.3 Comparison of Impacts -- Alternative 4 Design Options

Tables 3.5-1 and 3.5-2 summarize the impacts of Alternative 4 Design Options in the Central Utah County and North Utah County sections. The Preferred Alternative is Alternative 4: Widening and Reconstruction with Option C at American Fork Main Street, and Option D in the Provo/Orem area.

Table 3.5-1: Comparison of Impacts in the Provo/Orem Area

Option	APA Impacts (acres)	Prime Farmland Impacts (acres)	Farmland of Statewide Importance Impacts (acres)
A	None	0.15	9.08
B	None	0.15	9.08
C	None	None	0.45
D (Preferred)	None	None	0.45

Table 3.5-2: Comparison of American Fork Main Street Interchange Design Options

Option	APA Impacts (acres)	Prime Farmland Impacts (acres)	Farmland of Statewide Importance Impacts (acres)
A - Diamond	None	1.43	9.50
B - South SPUI	5.09	29.81	12.66
C - North SPUI (Preferred)	None	4.92	10.62

The land in agricultural production along I-15 will be able to continue in its current uses because Alternative 4 generally does not bisect any farms, does not eliminate access for agriculture areas, or affect their ability to remain agriculturally productive properties. American Fork Main Street Option B; however, would bisect the Allred property APA illustrated on Figure 3.5-10. Although an existing roadway currently bisects that property, the roadway would be widened with this option.

UDOT will maintain access to existing farmland and agricultural areas as part of the roadway design. Potential effects on the irrigation systems, including ditches, canals, and ponds, will be avoided or reconstructed as part of the design of Alternative 4. These facilities will be relocated and reconstructed to maintain continuity and use of the water delivery systems.

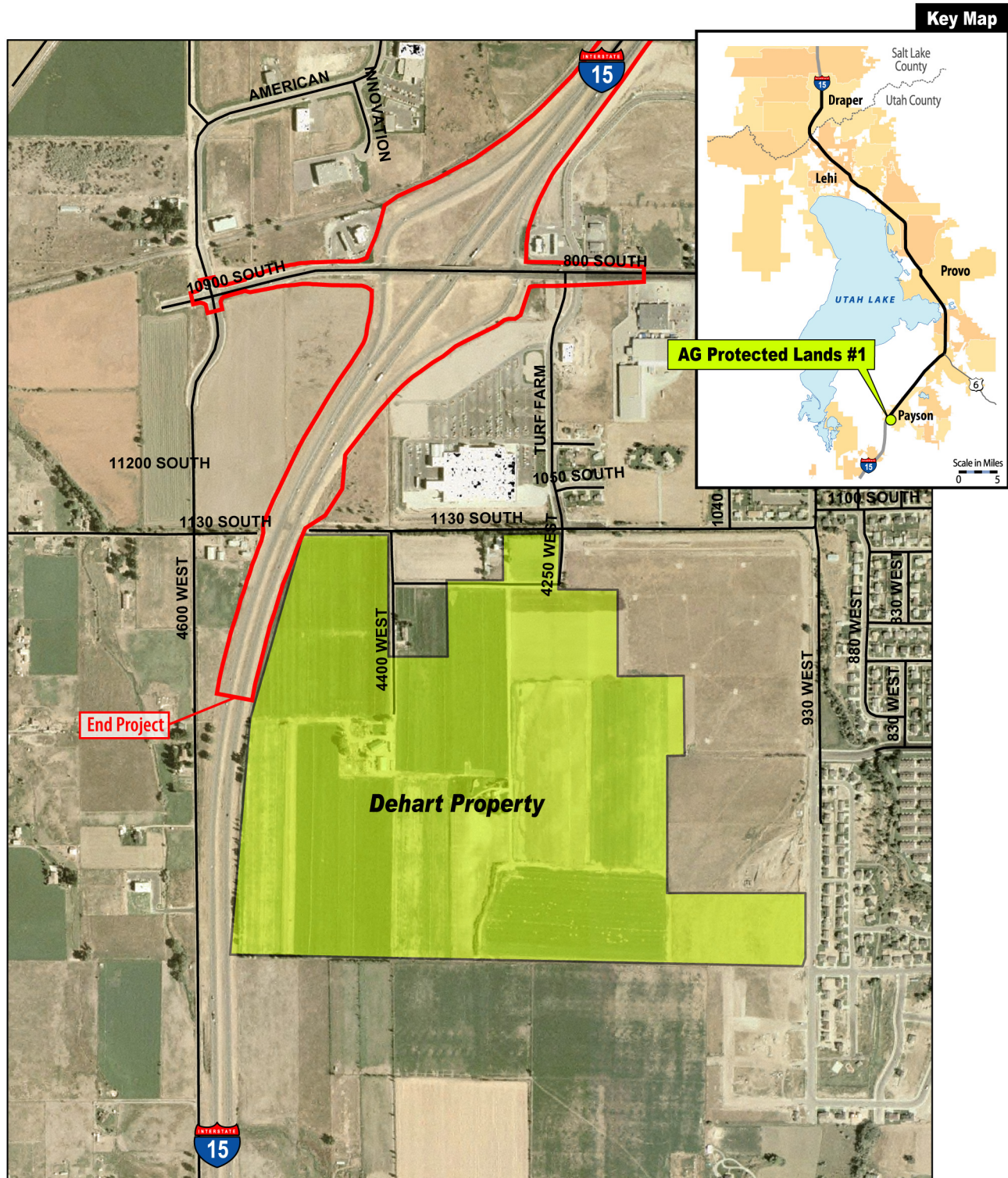


Figure 3.5-2

Agricultural Protection Areas & Impacts - South Payson

LEGEND:

Alternative 4 Area of Impact

Agricultural Protected Land



Agricultural Protection Areas & Impacts - Spanish Fork





Figure 3.5-4

Agricultural Protection Areas & Impacts - Orem

LEGEND:

Alternative 4 Area of Impact

Agricultural Protected Land

N



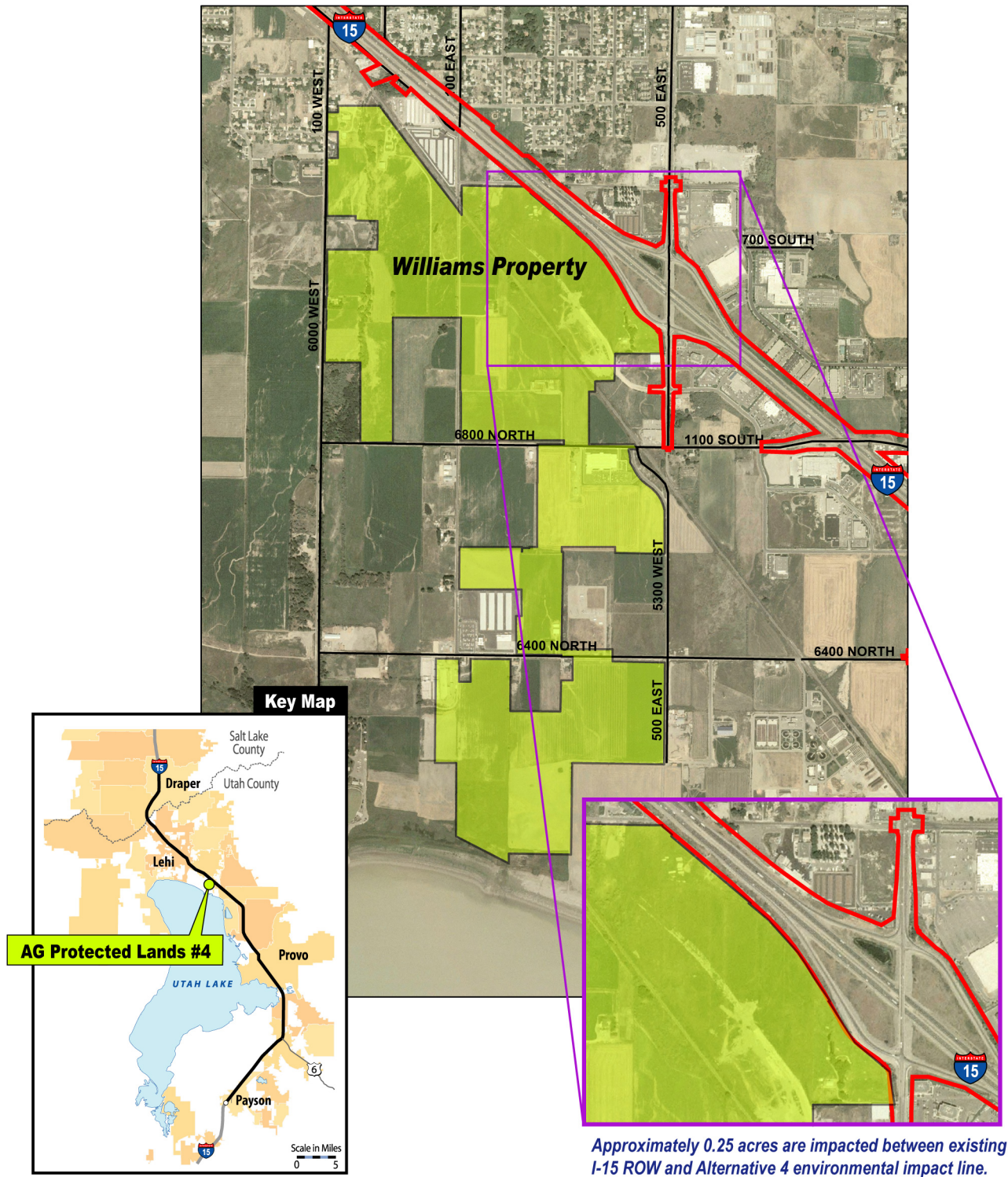
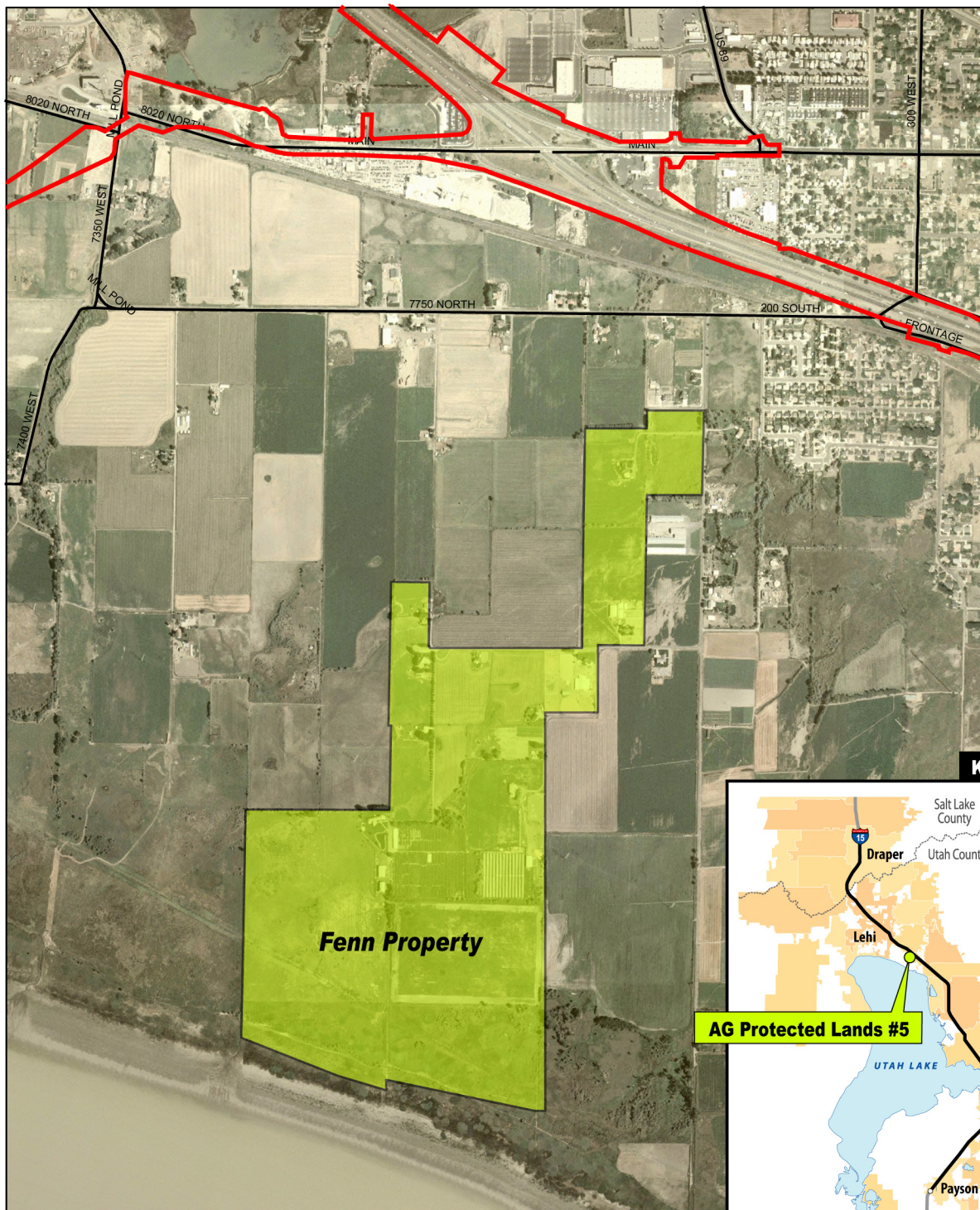


Figure 3.5-5
Agricultural Protection Areas & Impacts - American Fork



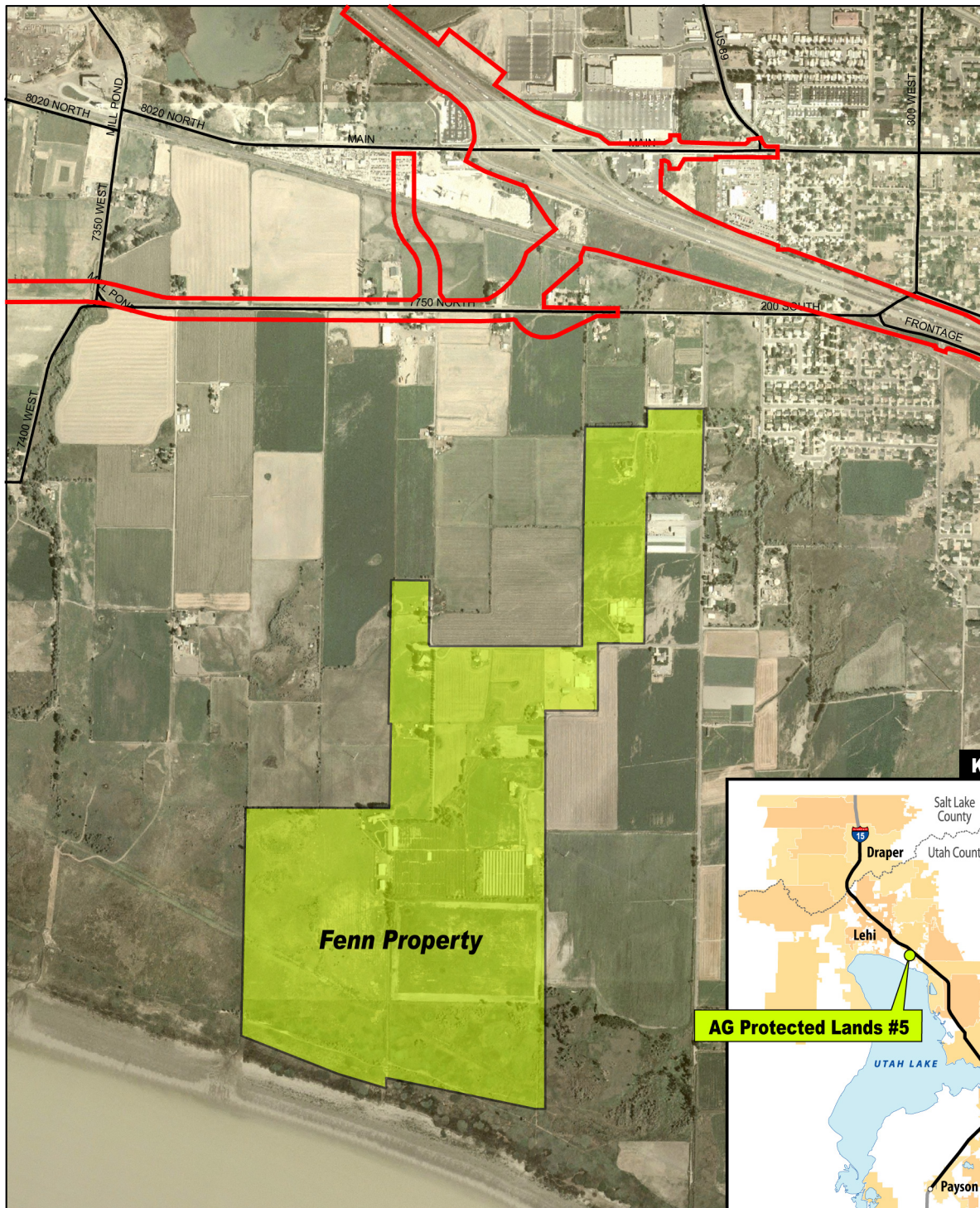
Scale in Miles
0 0.05 0.1

Figure 3.5-6
Agricultural Protection Areas & Impacts - American Fork - Option A

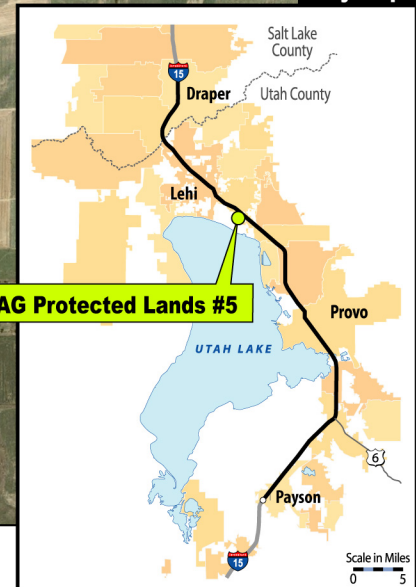
LEGEND:

- Alternative 4 Option A Area of Impact
- Agricultural Protected Land





Key Map



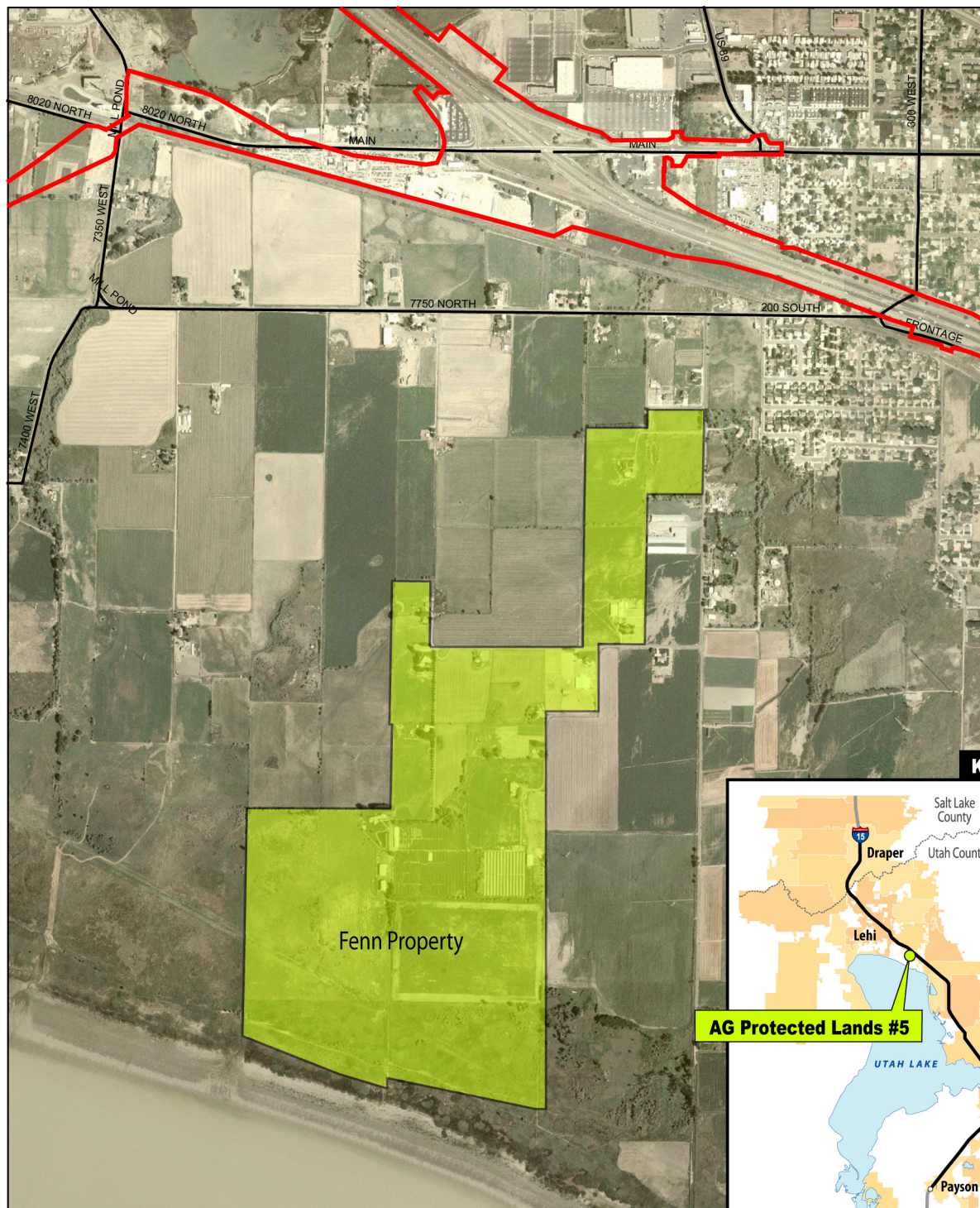
Scale in Miles
0 0.05 0.1

Figure 3.5-7
Agricultural Protection Areas & Impacts - American Fork - Option B

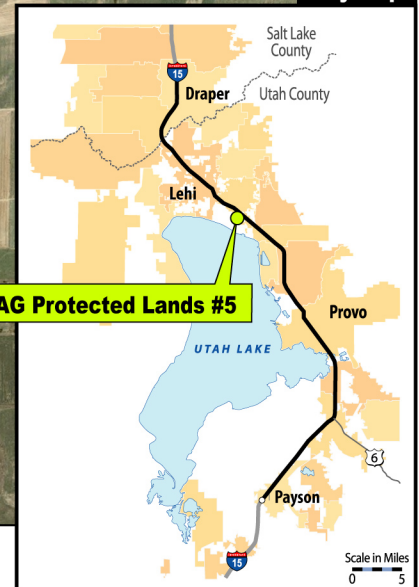
LEGEND:

- Alternative 4 Option B Area of Impact
- Agricultural Protected Land





Key Map



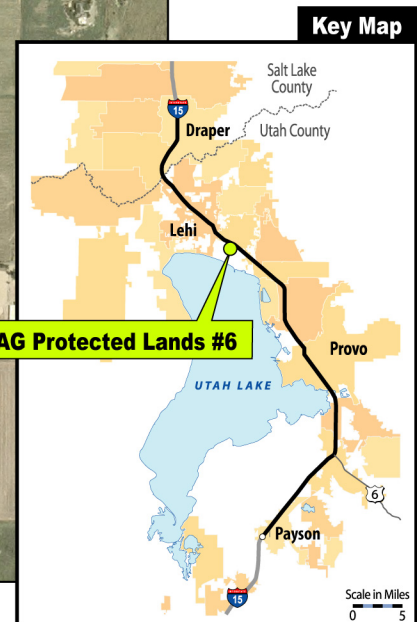
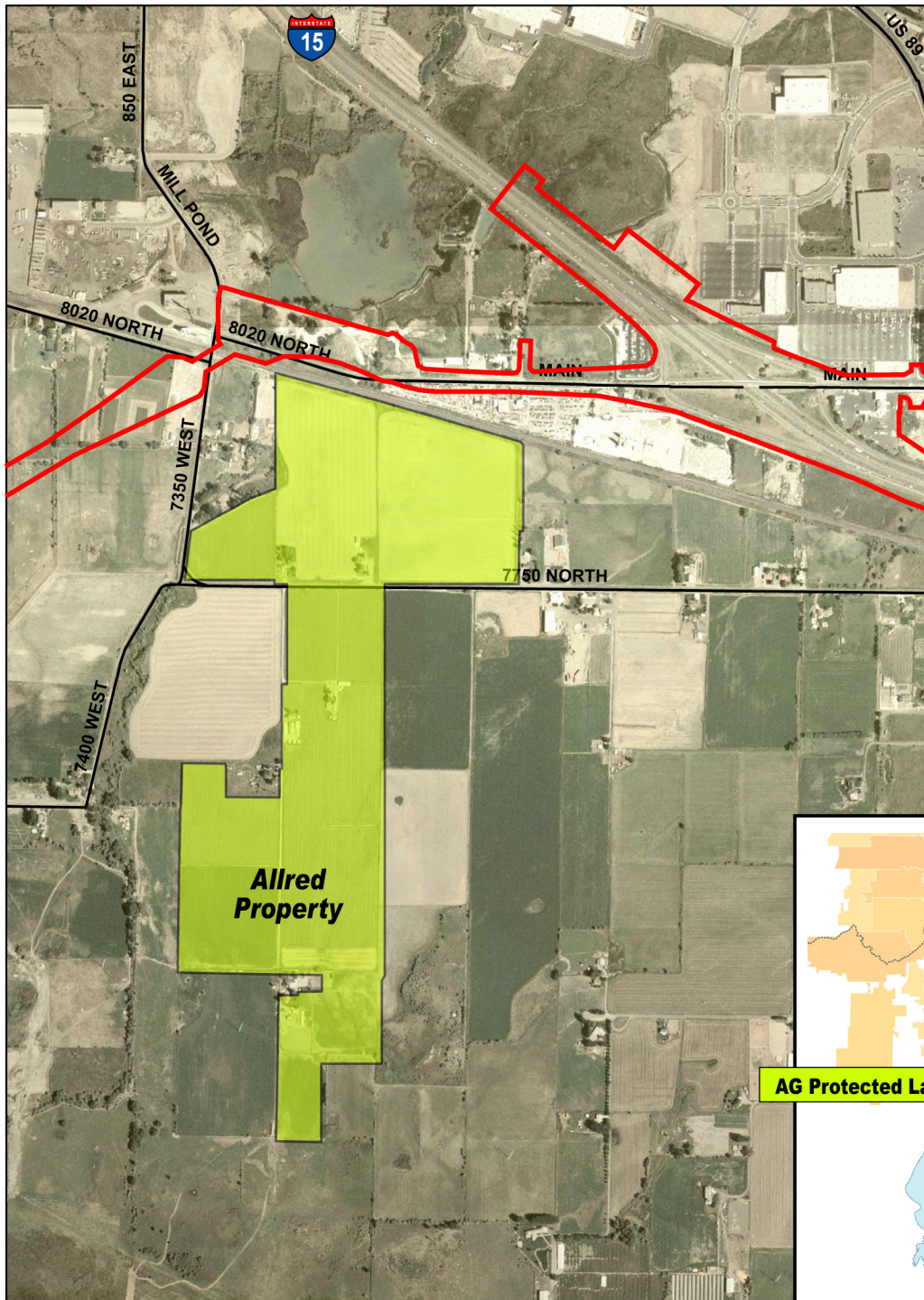
Scale in Miles
0 0.05 0.1

Figure 3.5-8
Agricultural Protection Areas & Impacts - American Fork - Option C (Preferred)

LEGEND:

- Alternative 4 Option C Area of Impact
- Agricultural Protected Land





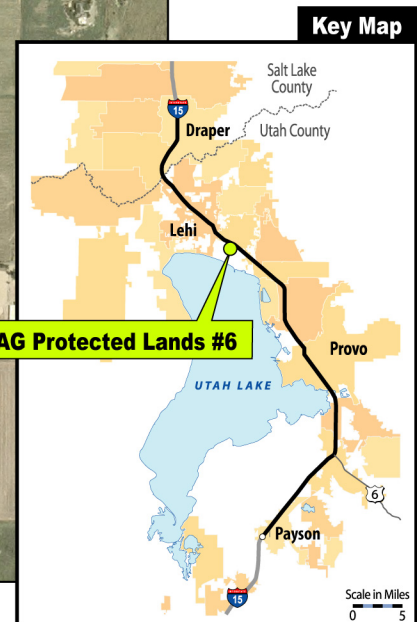
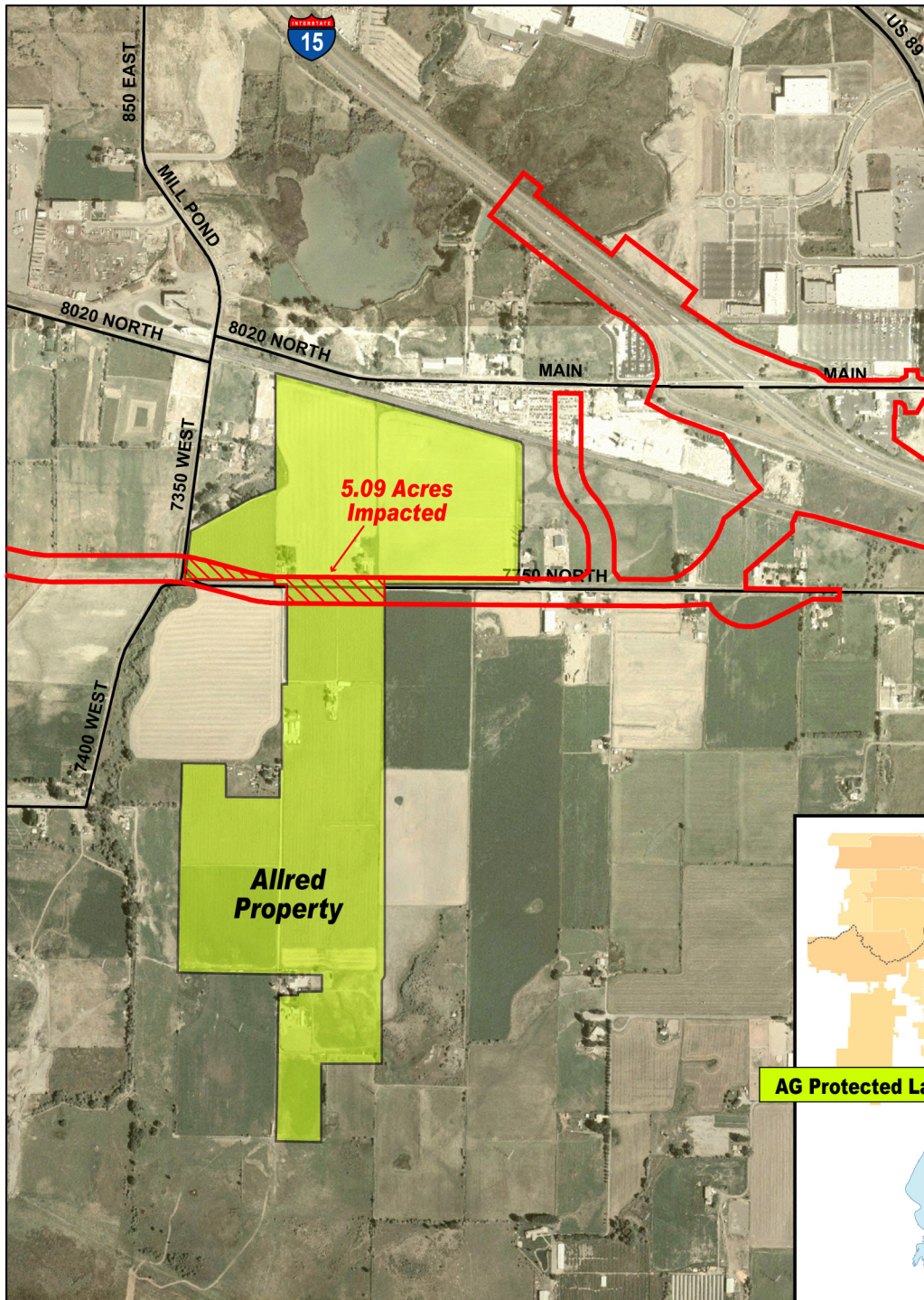
Scale in Miles
0 0.2 0.4

Figure 3.5-9
Agricultural Protection Areas & Impacts - American Fork - Option A

LEGEND:

- Alternative 4 Option A Area of Impact
- Agricultural Protected Land





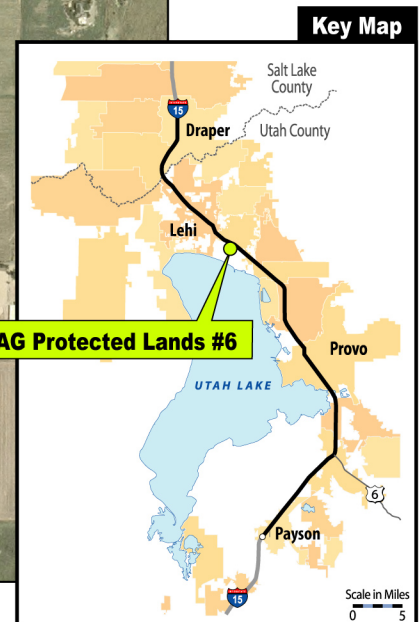
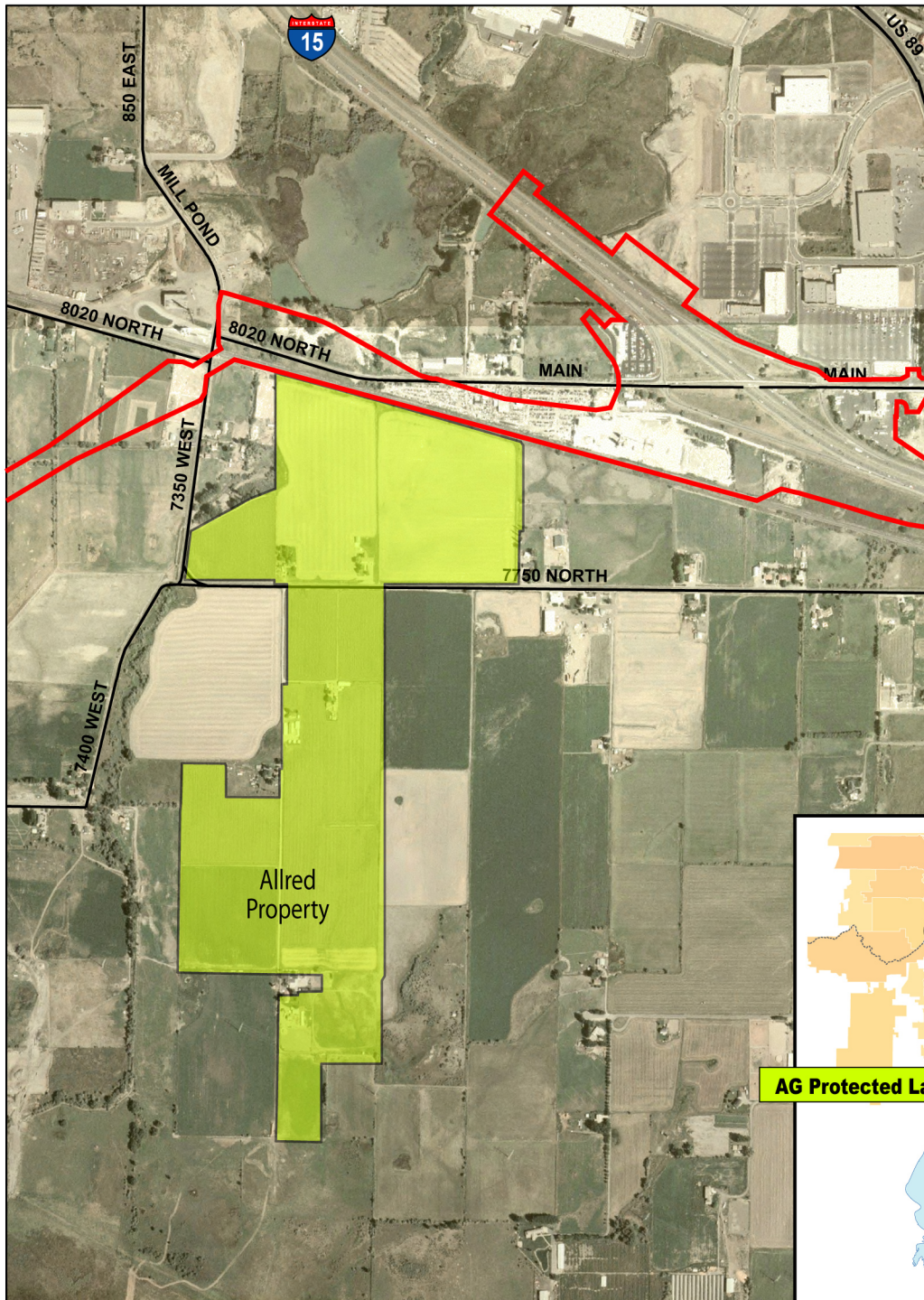
Scale in Miles
0 0.2 0.4

Figure 3.5-10
Agricultural Protection Areas & Impacts - American Fork - Option B

LEGEND:

- Alternative 4 Option B Area of Impact
- Agricultural Protected Land





Scale in Miles
0 0.2 0.4

Figure 3.5-11
Agricultural Protection Areas & Impacts - American Fork - Option C (Preferred)

LEGEND:



Alternative 4 Option C Area of Impact



Agricultural Protected Land



3.5.2.4 Indirect Impacts

A potential indirect impact on farmlands from Alternative 4 is the reduction in the role of agriculture and farming along the I-15 corridor. As more agricultural land is taken out of production through development and transportation projects, the impetus for remaining farm operations to continue would likely diminish. Options A and B in the Central Utah County section have greater potential to have indirect impacts on farmland and agricultural activity than Options C and D. These Options (A and B) remove more lands from production and that could contribute to a decline in the role of agriculture in Central Utah County. Likewise, Option B – South SPUI in the North Utah County section of Alternative 4 has greater potential to have indirect impacts on farmland and agricultural activity, and an Agricultural Protection Area, than either Option A – Diamond, or Option C – North SPUI. In Northern Utah County, Option B would remove more lands from production and this could contribute to a decline in the role of agriculture in the American Fork area.

3.5.3 Mitigation

No adverse impacts were identified under the Preferred Alternative, so mitigation is not proposed.